

# Pennsylvania Sea Grant Program 2012 NSGO Review

Jonathan Eigen

# PASG Management

- Management staff (Name, position, FTE)
  - Dr. Robert Light, Director .55 FTE (Match)
  - Eric Obert, Associate Director, Extension .5 FTE
  - Sarah Whitney, Associate Director, 1.0 FTE
  - Ann Faulds, Associate Director, 1.0 FTE
- 
- Size of Program - Small

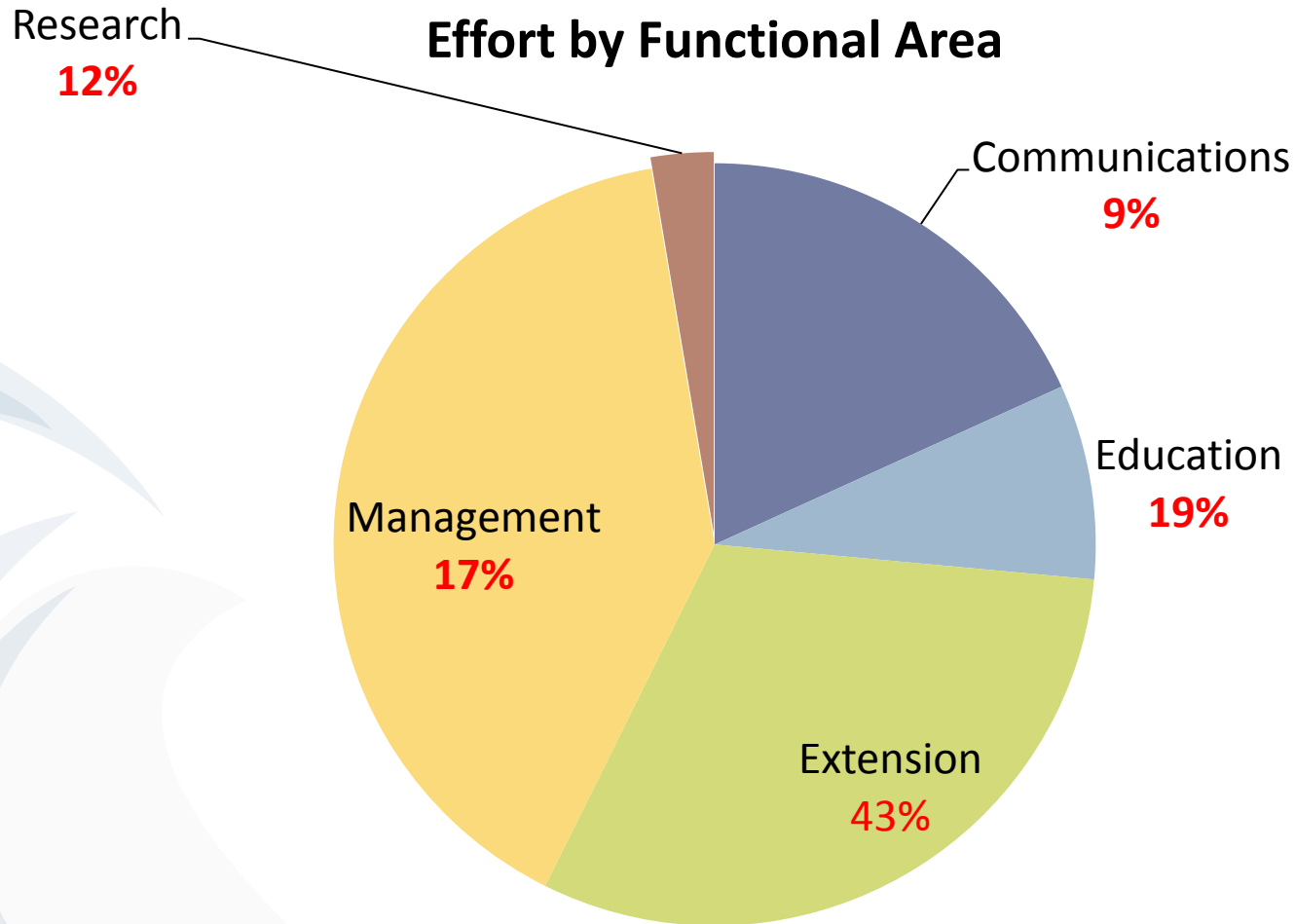
# Pennsylvania Management

- Total FTEs on staff (information in Annual report metrics)

Functional Area	# of individuals	# of FTEs supported by SG	# of FTEs supported by match/leverage
Mgt/Admin	10	1.15	1.11
Comm.	2	.99	.21
Ext.	10	2.82	2.96
Education	8	1.41	1.11
Research	4	.82	.76

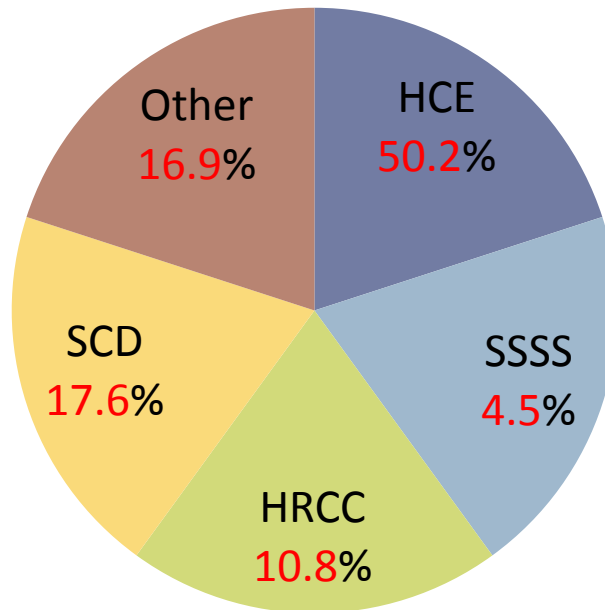
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# PA Omnibus Core Budget towards each Functional Area (Federal + Match)



# PA SG Budget towards each Focus Area (Fed+Match+Pass-Through+Leveraged funds)

**Effort by Focus Area**



# Significant PA Changes (since Jan. 2011)

- None

# PA Program RFP Process

- Penn State Water Resources Research Center (WRRC)
  - Under Penn State Institute for Energy and Environment (PSIEE)
  - WRCC issues statewide RFP
  - WRCC advisory group makes decision on which proposals to fund
  - 2009: PASG contributed \$18,000 to WRRC to fund 5 projects
- Regional Science Consortium (RSC)
  - Presque Isle Partnership Environmental Research Committee
  - Funds mostly small undergrad research projects from RSC member institutions
  - 2010: PASG contributed \$5,000 to fund 10 projects
  - 2011: PASG contributed \$5,000 to fund 4 projects
- Graduate Research Support
  - 2010: Sara Grise' (Shippensburg University) – Climate Change and AIS
  - 2011: Casey Bradshaw (Penn State University) – Round Goby Diet
  - 2011: Jake Lybrook (Gannon University) – Fish Index of Biotic Integrity and Stream Habitat
- Since 2000, PASG has internally funded 72 projects (\$915,993)

# RFP Process for 2012-2013 Projects – Research Metrics

Core Proposals	# of Proposals	# of institutions	# of home institutions
Pre-proposals submitted	0	0	0
Full proposals submitted	0	0	0
Proposals Funded	0	0	0



# Contribution to National Performance Measures and Metrics

Focus Area	Metric	Actual
SCD	Number of coastal communities who have adopted/implement sustainable - economic and environmental - development practices and policies	22
SCD	Number of coastal communities who have restored degraded ecosystems as a result of Sea Grant activities.	4
All	Jobs created - Economic (market and non-market) benefits derived from Sea Grant activities.	10

# PASG Impacts

- CCCAI funding helps municipal officials incorporate climate change into their decision making
  - September 2010, PASG hosted Two Climate Adaptation Workshops in Erie and Delaware Counties
  - 81 attendees participated
  - City of Chester is modifying the City's sea wall plan to be more environmentally friendly and less vulnerable to sea level rise, and three township engineers are using workshop generated maps and materials to guide their municipal planning.

# PASG Impacts

## Pennsylvania's Smart Boating, Clean Water program prevents over 100,000 pounds of boater waste from entering the landfill

- Staff continued a collaborative boat shrink-wrap recycling program in the Lake Erie and Delaware River watersheds in an effort to keep shrink-wrap out of waterways and landfills.
- Since 2008, 105,000 pounds of boat shrink-wrap has been collected from 17 participating marinas.
- Mondo Polymer Technologies, Inc. from Reno, Ohio has recycled the shrink-wrap into 10,571 environmentally safe guardrail blocks for highway guardrail systems across the nation.
- Recycled shrink-wrap is also being used by Engineering Plastics, Inc from Erie, PA for injection modeling.

Primary Focus Area:

Healthy Coastal Ecosystems



# PASG Impact

## Presque Isle Bay watershed restoration plan results in GLRI funding to restore Cascade Creek

Relevance, Response, Results:

In April 2010, PASG staff completed the *Presque Isle Bay watershed restoration, protection and monitoring plan*.

The purpose of the GIS-based plan is to provide a framework for action that will ensure that the quality and quantity of water and sediment entering Presque Isle Bay will not cause adverse impacts to the ecosystem.

In summer 2010, PASG and the Erie County Conservation District were awarded \$485,00 to implement the recommendations of the plan.

The funds are being used to stabilize streambanks, control erosion, and create habitat in Cascade Creek in Frontier Park, a 35 acre park within the City of Erie, Pennsylvania.

Specifically, a total of 1,100 linear feet of stream channelization improvements will be constructed equaling 2,200 of stabilized stream bank, which includes the establishment of a 50-foot wide riparian buffer, resulting in a 80.8 tons/year reduction of sediment being discharged to Presque Isle Bay.

Focus Area: Healthy Coastal Ecosystems



Cascade Creek (2001): Pre Restoration



Cascade Creek (2011): Post Restoration

# PASG Impacts

- Invasive species programming results in invasive species being removed from Pennsylvania State Parks.
  - Pilot project incorporates hands-on field experience with terrestrial invasive species into the Pennsylvania high school science curriculum
  - Students taught the impacts of invasive species on plants at Presque Isle State Park.
  - In 2010, the City of Erie School District incorporated the removal of invasive species into their curriculum and during their visits to Presque Isle State Park students removed invasive plant species from two acres of state park land
  - Primary Focus Area: Healthy Coastal Ecosystems

# PASG Impacts

- Tall Ships Shipboard Education program generates future stewards of the environment
  - In 2010, 536 K-12 students, 54 college students, and 47 teachers participated in the Tall Ships program
  - Most of the schools participating have adopted our curriculum and use the lessons to prepare students for the field experience and extend their knowledge in post studies
  - Program has evolved to include lessons in climate change, fisheries science, storm water runoff, invasive species, water quality/quantity, water columns, macro/micro invertebrates, focused on Lake Erie and Presque Isle Bay ecology
  - Primary Focus Area: **Healthy Coastal Ecosystems**



# 2010 Research Accomplishments

15

- Conducted a habitat assessment of 321 stream locations across the PA Lake Erie watershed ([http://seagrants.psu.edu/habitat\\_report.pdf](http://seagrants.psu.edu/habitat_report.pdf)). Data are being used to develop an Integrated Water Resources Management Plan for the Pennsylvania Lake Erie watershed.
- Rutter, M.A. 2010. A statistical approach for establishing tumor incidence delisting criteria in areas of concern: A case study. *Journal of Great Lakes Research* 36: 646-655.